

WHAT IS CLAIMED IS:

1. A method of coating an optical fiber constituted by a doped silica core and silica cladding, in which said core and said cladding are surrounded by a coating constituted by a first coating portion of photocurable resin and a second coating portion made by extruding a thermoplastic polymer, said thermoplastic polymer having mixed therein an additive constituted by a thermotropic liquid crystal polymer.
2. A method according to claim 1, in which said thermoplastic polymer is selected from the group comprising at least polyethylene and polyamide.
3. A method according to claim 2, in which said thermoplastic polymer is polyamide 12.
4. A method according to claim 1, in which said thermotropic liquid crystal polymer is selected from the group comprising at least polyesters, and in particular completely aromatic polyesters, and aromatic copolyesters.
5. A method according to claim 1, in which said additive and said thermoplastic polymer are previously mixed hot in selected proportions in order to constitute an alloy.
6. A method according to claim 5, in which the concentration of said additive by weight is not greater than about 10% of the weight of the alloy.
7. A method according to claim 6, in which said concentration of additive, by weight, lies in the range about 2% to about 10% of the weight of the alloy.
8. A method according to claim 7, in which said alloy is cooled down and then granulated.

9. A method according to claim 8, in which said granules are dried prior to being extruded.

5 10. A method according to claim 1, in which said second portion of the coating is extruded using an extruder having a tubing die.

10 11. A method according to claim 1, in which said photocurable resin is acrylic based.

12. An optical fiber constituted by a doped silica core and silica cladding in which said core and said cladding are surrounded by a coating constituted by a first
15 coating portion of photocurable resin and a second coating portion of thermoplastic polymer containing an additive constituted by a thermotropic liquid crystal polymer.